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(a) a liquefied petroleum gas containing carbonyl sulfide as an impurity; and

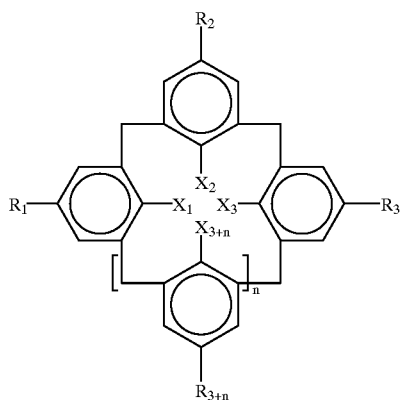
(b) a calixarene complexing agent in an amount sufficient to remove said carbonyl sulfide from the petroleum gas stream; and

recovering the carbonyl sulfide-free liquid petroleum gas stream.

2. The process of claim 1 wherein the liquefied petroleum gas and the calixarene complexing agent is contacted at a temperature and pressure effective to retain said petroleum gas stream in the liquid state.

3. The process of claim 2 wherein the contact is carried out at a temperature of about 40° C. to about 200° C.

4. The process of claim 1 wherein the calixarene complexing agent is of the formula I



wherein

$R_1$ – $R_{3+n}$  are each independently H, primary  $C_{1-20}$  alkyl, secondary  $C_{3-20}$  alkyl, tertiary  $C_{4-20}$  alkyl,  $C_{1-20}$

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alkoxy,  $C_{1-20}$  thioalkyl,  $C_{6-20}$  aryl,  $C_{6-20}$  aryloxy,  $C_{6-20}$  aryl, nitro, halogen and  $CH_2NR_2^1$  where  $R^1$  is a  $C_{1-20}$  alkyl;

$X_1$ – $X_{3+n}$  are each independently H, OH, SH,  $C_{1-20}$  alkoxy,  $C_{1-20}$  thioalkyl,  $C_{6-20}$  aryloxy,  $OC(O)C_{1-20}$  alkyl and  $C_{2-20}$  alkenyloxy; and

$n$  is an integer of 1 to 5.

5. The process of claim 4 wherein  $n$  is 4.

6. The process of claim 5 wherein the calixarene complexing agent is a para-substituted calix[4]arene.

7. The process of claim 6 wherein the calixarene complexing agent is p-t-butyl-calix[4]arene.

8. The process of claim 1 wherein the calixarene complexing agent is a solid.

9. The process of claim 1 wherein the calixarene complexing agent is immobilized on an inert support.

10. The process of claim 1 wherein the calixarene complexing agent is used in an amount sufficient to remove substantially all of the carbonyl sulfide from the liquefied petroleum gas.

11. The process of claim 1 wherein the liquefied petroleum gas comprises a liquid hydrocarbon selected from the group consisting of propane, butane and mixtures thereof.

12. The process of claim 11 wherein the liquid hydrocarbon further comprises hydrocarbons selected from the group consisting of ethane, propylene, isobutane, butene, pentane and mixtures thereof.

13. A process for the removal of carbonyl sulfide from a liquid hydrocarbon, which method comprises contacting

(a) a liquid hydrocarbon containing carbonyl sulfide as an impurity; and

(b) a calixarene complexing agent in an amount sufficient to remove said carbonyl sulfide from the liquid hydrocarbon; and

recovering the carbonyl sulfide-free liquid hydrocarbon.

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